



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



DEC 05 2013

Mr. Gilbert Rodriguez  
JR Simplot Company  
P O Box 128  
Helm, CA 93627-0128

**Re: Notice of Minor Title V Permit Modification**  
**District Facility # C-705**  
**Project # C-1122759**

Dear Mr. Rodriguez:

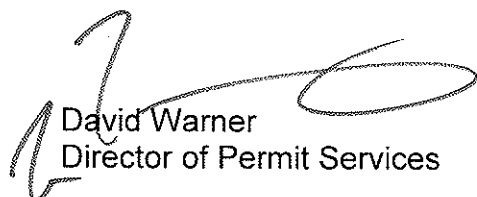
Enclosed is the District's analysis of your application for a minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued C-705-1-9 into the Title V operating permit. The proposed project is to install a selective catalytic reduction (SCR) system and lower the permitted NOx emissions limit for compliance with District Rule 4320.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued C-705-1-9, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



David Warner  
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin  
Executive Director/Air Pollution Control Officer

Northern Region  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585

# **TITLE V APPLICATION REVIEW**

Minor Modification  
Project #: C-1122759

Engineer: Robert Gilles  
Date: December 3, 2013

Facility Number: C-705  
Facility Name: JR Simplot Company  
Mailing Address: RT 1100-0023  
PO BOX 9168  
Boise, ID 83707

Contact Name: Gilbert Rodriguez  
Phone: (559) 392-6902

Responsible Official: Gilbert Rodriguez  
Title: Production Manager

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## **I. PROPOSAL**

JR Simplot Company is proposing a Title V minor permit modification to incorporate the recently issued ATC C-705-1-9 into the Title V operating permit. JR Simplot Company proposes to modify the boiler unit to install a selective catalytic reduction (SCR) system and to lower the NOx emissions limit for compliance with District Rule 4320.

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements and to provide the legal and factual basis for the proposed revisions.

## **II. FACILITY LOCATION**

The project is located at 12688 S. Colorado Avenue in Helm, California.

## **III. EQUIPMENT DESCRIPTION**

C-705-1-8: 71.4 MMBTU/HR UNION IRON WORKS MODEL SPG-50-FS  
NATURAL GAS FIRED BOILER WITH LOW-NOX BURNER AND  
SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH  
FLUE GAS RECIRCULATION (FGR) SYSTEM

#### **IV. SCOPE OF EPA AND PUBLIC REVIEW**

This change to a Title V permit is considered to be a minor modification and, as such, requires no public review.

#### **V. APPLICABLE REQUIREMENTS**

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

#### **VI. DESCRIPTION OF PROPOSED MODIFICATIONS**

JR Simplot Company proposes to install a selective catalytic reduction (SCR) system on the existing boiler and to reduce the permitted NOx emissions limit for compliance with the requirements of District Rule 4320.

Condition 1 was added to the proposed Permit to Operate to ensure the unit is maintained in good operating condition and operated in a manner to minimize emissions of air contaminants into the atmosphere.

Condition 2 on the current Permit to Operate was replaced by permit condition 3 on the proposed Permit to Operate and reflects the revised NOx emissions limit.

Condition 5 was added to the proposed Permit to Operate to enforce the daily emissions limit for ammonia emissions for compliance with District Rule 2201.

Conditions 14, 15, and 17 on the current Permit to Operate were replaced by permit conditions 14 through 17, 19 through 28, and 32 on the proposed Permit to Operate. These conditions specify the source testing requirements for compliance with District Rule 4320.

Condition 30 was added to the proposed Permit to Operate to enforce the sulfur limit requirements of District Rule 4320.

Condition 1 on the Authority to Construct was not included on the proposed Permit to Operate since this requirement was satisfied with the implementation of the authorized modifications.

Condition 2 on the Authority to Construct was not included on the proposed Permit to Operate since the requirement was satisfied with the submittal of this minor modification application.

Condition 4 on the Authority to Construct was not included on the proposed Permit to Operate since it is included on the facility-wide permit, C-705-0 as condition 22.

Condition 5 on the Authority to Construct was not included on the proposed Permit to Operate since it is included on the facility-wide permit, C-705-0 as condition 41.

## **VII. COMPLIANCE**

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and

3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

## **VIII. ATTACHMENTS**

- A. Proposed Modified Title V Operating Permit No. C-705-1-8
- B. Authority to Construct No. C-705-1-9
- C. Emissions Increases
- D. Application
- E. Previous Title V Operating Permit No. C-705-1-6

# ATTACHMENT A

Proposed Modified Title V Operating Permit No.  
C-705-1-8

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-705-1-8

**EXPIRATION DATE:** 11/30/2014

**EQUIPMENT DESCRIPTION:**

71.4 MMBTU/HR UNION IRON WORKS MODEL SPG-50-FS NATURAL GAS FIRED BOILER WITH LOW-NOX BURNER AND SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This unit shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. NOx emissions shall not exceed 5 ppmv @ 3% O<sub>2</sub>. [District Rules 2201, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
4. CO emissions shall not exceed 200 ppmv @ 3% O<sub>2</sub>. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
5. Ammonia emissions shall not exceed 10 ppmv @ 3% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Emissions shall not exceed any of the following limits: 0.0076 lb-PM<sub>10</sub>/MMBtu, 0.0006 lb-SO<sub>x</sub>/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201; 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
7. The maximum heat input to the unit shall not exceed 9 billion Btu per calendar year. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
8. Owner/operator shall install and maintain a non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit, or shall install a master meter which measures fuel to all units in a group of similar units. [District Rule 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
10. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr. [District Rule 4301] Federally Enforceable Through Title V Permit
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 4301] Federally Enforceable Through Title V Permit
12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. To demonstrate compliance with this requirement, the unit shall be fired on PUC-quality natural gas or on natural gas with sulfur content not exceeding 4.2% by weight. [District Rule 4801 and County Rule 406 (Fresno)] Federally Enforceable Through Title V Permit
13. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmvd or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, 4320 and 4351]
18. When determining sulfur emissions by fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
19. Source testing to measure NO<sub>x</sub>, CO, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
20. Source testing to measure NO<sub>x</sub>, CO, and NH<sub>3</sub> emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
21. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub> at least once during each month in which source testing is not performed. NO<sub>x</sub>, CO and O<sub>2</sub> monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH<sub>3</sub> monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
22. If the NO<sub>x</sub>, CO or NH<sub>3</sub> concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
23. All NO<sub>x</sub>, CO, O<sub>2</sub> and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO<sub>x</sub>, CO and O<sub>2</sub> analyzer as well as the NH<sub>3</sub> emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. Ammonia emission readings shall be conducted at the time the NO<sub>x</sub>, CO and O<sub>2</sub> readings are taken. The readings shall be converted to ppmvd @ 3% O<sub>2</sub>. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
25. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4320 and 4351]
26. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4320 and 4351]
27. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4320 and 4351]
28. {3278} Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]
29. The permittee shall monitor, at least on a monthly basis, the operational characteristics recommended by the unit manufacturer, e.g. the amount of water use, the amount of unit blow down, the exhaust stack temperature, or other characteristics recommended by the unit manufacturer. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 day of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
30. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
31. If the unit is fired on PUC-regulated natural gas, then the operator shall maintain copies of fuel invoices and supplier certification of fuel sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
32. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent by volume and the measured NO<sub>x</sub>, CO and NH<sub>3</sub> concentrations corrected to 3% O<sub>2</sub>, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH<sub>3</sub> emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
33. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 4305, 4306, 4320 and 4351 and 40 CFR Part 60.48c(g)(2)] Federally Enforceable Through Title V Permit
34. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, 4320 and 4351 and 40 CFR Part 60.48c(i)] Federally Enforceable Through Title V Permit
35. This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [District Rules 2070 and 2080 and Public Resources Code 21000-21177: California Environmental Quality Act]

These terms and conditions are part of the Facility-wide Permit to Operate.

# ATTACHMENT B

Authority to Construct No.  
C-705-1-9



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



## AUTHORITY TO CONSTRUCT

PERMIT NO: C-705-1-9

ISSUANCE DATE: 11/07/2013

LEGAL OWNER OR OPERATOR: J R SIMPLOT COMPANY

MAILING ADDRESS: RT 1100-0023  
PO BOX 9168  
BOISE, ID 83707

LOCATION: 12688 S COLORADO AVE  
HELM, CA 93627

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 71.4 MMBTU/HR UNION IRON WORKS MODEL SPG-50-FS NATURAL GAS FIRED BOILER WITH LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR): TO INSTALL A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND MODIFY THE PERMIT FOR RULE 4320 COMPLIANCE

## CONDITIONS

1. This Authority to Construct (ATC) shall supersede and replace ATC C-705-1-7. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This unit shall be fired exclusively on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services

C-705-1-9 : Nov 7 2013 5:05PM - GILLESB Joint Inspection NOT Required

8. NO<sub>x</sub> emissions shall not exceed 5 ppmv @ 3% O<sub>2</sub>. [District Rules 2201, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
9. CO emissions shall not exceed 200 ppmv @ 3% O<sub>2</sub>. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
10. Ammonia emissions shall not exceed 10 ppmv @ 3% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emissions shall not exceed any of the following limits: 0.0076 lb-PM<sub>10</sub>/MMBtu, 0.0006 lb-SO<sub>x</sub>/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201; 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
12. The maximum heat input to the unit shall not exceed 9 billion Btu per calendar year. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
13. Owner/operator shall install and maintain a non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit, or shall install a master meter which measures fuel to all units in a group of similar units. [District Rule 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
14. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
15. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr. [District Rule 4301] Federally Enforceable Through Title V Permit
16. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 4301] Federally Enforceable Through Title V Permit
17. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. To demonstrate compliance with this requirement, the unit shall be fired on PUC-regulated natural gas or on natural gas with sulfur content not exceeding 4.2% by weight. [District Rule 4801 and County Rule 406 (Fresno)] Federally Enforceable Through Title V Permit
18. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
20. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The source test plan shall identify which basis (ppmvd or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
22. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, 4320 and 4351]
23. When determining sulfur emissions by fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails, weekly testing shall resume. [District Rule 2520] Federally Enforceable Through Title V Permit
24. Source testing to measure NO<sub>x</sub>, CO, and NH<sub>3</sub> emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

25. Source testing to measure NO<sub>x</sub>, CO, and NH<sub>3</sub> emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub> at least once during each month in which source testing is not performed. NO<sub>x</sub>, CO and O<sub>2</sub> monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH<sub>3</sub> monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
27. If the NO<sub>x</sub>, CO or NH<sub>3</sub> concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
28. All NO<sub>x</sub>, CO, O<sub>2</sub> and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO<sub>x</sub>, CO and O<sub>2</sub> analyzer as well as the NH<sub>3</sub> emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
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30. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, 4320 and 4351]
31. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, 4320 and 4351]
32. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4320 and 4351]
33. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081]
34. The permittee shall monitor, at least on a monthly basis, the operational characteristics recommended by the unit manufacturer, e.g. the amount of water use, the amount of unit blow down, the exhaust stack temperature, or other characteristics recommended by the unit manufacturer. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 day of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
35. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. If the unit is fired on PUC-regulated natural gas, then the operator shall maintain copies of fuel invoices and supplier certification of fuel sulfur content. [District Rule 2520] Federally Enforceable Through Title V Permit
37. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, NH<sub>3</sub> and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent by volume and the measured NO<sub>x</sub>, CO and NH<sub>3</sub> concentrations corrected to 3% O<sub>2</sub>, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH<sub>3</sub> emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
38. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 4305, 4306, 4320 and 4351 and 40 CFR Part 60.48c(g)(2)] Federally Enforceable Through Title V Permit
39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, 4320 and 4351 and 40 CFR Part 60.48c(i)] Federally Enforceable Through Title V Permit
40. This permit does not authorize the violation of any conditions established for this facility in the Conditional Use Permit (CUP), Special Use Permit (SUP), Site Approval, Site Plan Review (SPR), or other approval documents issued by a local, state, or federal agency. [District Rules 2070 and 2080 and Public Resources Code 21000-21177: California Environmental Quality Act]

# ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM <sub>10</sub>
C-705-1-8	-272	0	0	0	0
<b>TOTAL</b>	<b>-272</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# ATTACHMENT D

Application

# San Joaquin Valley Air Pollution Control District

www.valleyair.org


**RECEIVED**

AUG 15 2012

**Permits Services  
SJVAPCD**

## Permit Application For:

[ ] ADMINISTRATIVE AMENDMENT    [X] MINOR MODIFICATION    [ ] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: <b>JR SIMPLOT COMPANY</b>		
2. MAILING ADDRESS:  STREET/P.O. BOX: <u>12688 S COLORADO AVE / PO BOX 128</u>  CITY: <u>HELM</u> STATE: <u>CA</u> 9-DIGIT ZIP CODE: <u>93627-0128</u>		
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:  STREET: <u>12688 S COLORADO AVE</u> CITY: <u>HELM, CA</u>  ____ 1/4 SECTION _____ TOWNSHIP _____ RANGE _____		INSTALLATION DATE: <b>OCTOBER 2012</b>
4. GENERAL NATURE OF BUSINESS: NITROGEN FERTILIZER MANUFACTURING		
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)  Modification of a 71.4 MMBTU/HR Union Iron Works Model SPG-50 Natural Gas Fired Boiler with low NOx Burner and FGR.  Removal of FGR system, installation of Selective Catalytic Reduction (SCR) system, and modification of the permit conditions for SJVAPCD Rule 4320 Compliance.  Authority To Construct C-705-1-7 Issued 08/01/2012		
6. TYPE OR PRINT NAME OF APPLICANT: <b>Gilbert Rodriguez</b>		TITLE OF APPLICANT: <b>Production Manager</b>
7. SIGNATURE OF APPLICANT: 	DATE: <b>08/14/2012</b>	PHON: (559) 392 - 6902 FAX: (559) 866 - 1507 EMAIL: gilbert.rodriguez@simplot.com

### For APCD Use Only:

DATE STAMP	FILING FEE RECEIVED: \$ <u>71.00</u>		CHECK#: <u>1227261</u>
	DATE PAID: <u>8/15/12.</u>		
	PROJECT NO: <u>C-1122759</u>		FACILITY ID: <u>C-705</u>

**San Joaquin Valley  
Unified Air Pollution Control District**

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

☐ SIGNIFICANT PERMIT MODIFICATION  
☒ MINOR PERMIT MODIFICATION

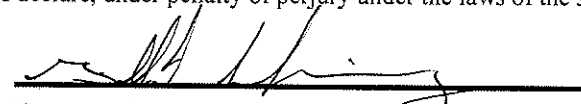
☐ ADMINISTRATIVE  
AMENDMENT

COMPANY NAME: <u>JR SIMPLOT COMPANY</u>	FACILITY ID: <u>C-705</u>
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: <u>JR SIMPLOT COMPANY</u>	
3. Agent to the Owner: <u>GILBERT RODRIGUEZ</u>	

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

  
Signature of Responsible Official

08/14/2012  
Date

GILBERT RODRIGUEZ  
Name of Responsible Official (please print)

PRODUCTION MANAGER  
Title of Responsible Official (please print)

# ATTACHMENT E

Previous Title V Operating Permit No.  
C-705-1-6

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-705-1-6

**EXPIRATION DATE:** 11/30/2014

**EQUIPMENT DESCRIPTION:**

71.4 MMBTU/HR UNION IRON WORKS, MODEL SPG-50-FS, NATURAL GAS FIRED BOILER WITH LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR)

## PERMIT UNIT REQUIREMENTS

---

1. This boiler shall be fired exclusively on PUC quality natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
2. NOx emissions shall not exceed 30 ppmv @ 3% O<sub>2</sub>. [District NSR Rule] Federally Enforceable Through Title V Permit
3. CO emissions shall not exceed 200 ppmv @ 3% O<sub>2</sub>. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Emissions shall not exceed any of the following limits: 0.0076 lb-PM<sub>10</sub>/MMBtu, 0.0006 lb-SO<sub>x</sub>/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The maximum heat input to the unit shall not exceed 9 billion Btu per calendar year. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
6. Owner/operator shall install and maintain a non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit, or shall install a master meter which measures fuel to all units in a group of similar units. [District Rule 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr. [District Rules 4201 and 4301] Federally Enforceable Through Title V Permit
8. Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 lb/hr. [District Rule 4301] Federally Enforceable Through Title V Permit
9. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO<sub>2</sub>. [District Rule 4301] Federally Enforceable Through Title V Permit
10. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. To demonstrate compliance with this requirement, the unit shall be fired on PUC-regulated natural gas or on natural gas with sulfur content not exceeding 4.2% by weight. [District Rule 4801 and County Rule 406 (Fresno)] Federally Enforceable Through Title V Permit
11. If the unit is fired on PUC-regulated natural gas, then the operator shall maintain copies of fuel invoices and supplier certification of fuel sulfur content. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
12. If the unit is fired on noncertified gaseous fuel and compliance with SO<sub>x</sub> emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. When determining sulfur emissions by fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails, weekly testing shall resume. [District Rule 2520, 9.3] Federally Enforceable Through Title V Permit
14. Owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rules 4306 and 4351] Federally Enforceable Through Title V Permit
15. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rules 4306 and 4351] Federally Enforceable Through Title V Permit
16. The permittee shall monitor, at least on a monthly basis, the operational characteristics recommended by the unit manufacturer, e.g. the amount of water use, the amount of unit blow down, the exhaust stack temperature, or other characteristics recommended by the unit manufacturer. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 day of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. Records of tune-up and monitoring of the operational characteristics of the unit shall be maintained. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
18. Records of monthly and annual heat input of the unit shall be maintained. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.